

I Claim:

1. A campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel, comprising:

(A) a fire pan adapted to be supported in an upright orientation on a support surface, said fire pan having an upper rim and a pan interior;

(B) at least one diffuser element disposed in the pan interior of said fire pan and secured thereto when in an assembled state; and

(C) a gas injector extending into the interior of said fire pan when in the assembled state and operative to introduce vaporized fuel into the pan interior when connected to the source of fuel, said gas injector terminating in a gas outlet located proximately to said diffuser element such that vaporized fuel introduced into the pan interior is incident on a region adjacent to said diffuser element, said diffuser element thereby operative to disperse the vaporized fuel about the fire pan interior when said gas introduces the vaporized fuel therein.

2. A campfire apparatus according to claim 1 wherein said gas outlet is directed at said diffuser element such that vaporized fuel is incident on said diffuser element.

3. A campfire apparatus according to claim 1 including a quantity of low-density, non-flammable particulate material adapted to be disposed in said fire pan at a depth sufficient to cover the gas outlet when in the assembled state.

4. A campfire apparatus according to claim 3 wherein said particulate material is selected from a group consisting of clay, shale, slate, and slag particles, zeolites, alumina hydrates, borates, perlite, vermiculite and sand.

5. A campfire apparatus according to claim 3 wherein said particulate material is vermiculite.

6. A campfire apparatus according to claim 1 including a connector associated with said gas injector and adapted to connect to the source of fuel when in an assembled state.

7. A campfire apparatus according to claim 1 including a lid sized and adapted to enclose said pan interior when placed thereon in a mounted state, with a portion of said lid being supported by a portion of said main body.

8. A campfire apparatus according to claim 7 wherein said upper rim extends continuously around said fire pan and including an inwardly projecting shoulder portion disposed on said upper rim, said shoulder portion operative to support said lid when said lid is in the mounted state.

9. A campfire apparatus according to claim 7 wherein an upper portion of said diffuser element is configured to connect to said lid and thereby to selectively attach said lid to said fire pan when in the mounted state.

10. A campfire apparatus according to claim 1 wherein said fire pan is configured as a geometric shell selected from a group consisting of: a portion of a spherical shell, a truncated pyramidal shell, a rectangular parallelepiped shell, a polyhedral shell, a conical shell, a cylindrical shell and a pyramidal shell.

11. A campfire apparatus according to claim 1 wherein said upper rim extends in a plane parallel to said support surface when in an upright position, and when in a tipped-over position, the plane of said upper rim is oriented at no less than ninety degrees to said support surface.

12. A campfire apparatus according to claim 1 wherein said fire pan includes a lower chamber portion defining a lower chamber interior and an upper pan portion, said gas outlet terminating in the lower chamber interior.

13. A campfire apparatus according to claim 12 wherein said gas injector is located entirely within said lower chamber.

14. A campfire apparatus according to claim 1 wherein said diffuser element is centrally located in the pan interior.

15. A campfire apparatus according to claim 1 wherein said gas injector is configured as a substantially rigid, elongate tubular member.

16. A campfire apparatus according to claim 1 including a base adapted to rest on the support surface, said fire pan supported by said base when in the assembled state.

17. A campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel, comprising:

(A) a base adapted to rest on a support surface;

(B) a fire pan adapted to be supported by said base in an upright orientation on a support surface, said fire pan including a bottom wall and a surrounding sidewall so as to have an upper rim and an upwardly opening pan interior;

(C) a centrally located post defining a diffuser element disposed in the pan interior of said fire pan and secured thereto when in an assembled state, said post extending upwardly from said bottom wall to terminate in a free end portion; and

(D) a gas injector extending into the interior of said fire pan when in the assembled state and operative to introduce vaporized fuel into the pan interior when connected to the source of fuel, said gas injector terminating in a gas outlet located proximately to and directed at said post such that vaporized fuel introduced into the pan interior is incident on said post, said post thereby operative to disperse the

vaporized fuel about the fire pan interior when said gas introduces the vaporized fuel therein.

18. A campfire apparatus according to claim 17 wherein surrounding sidewall is upwardly divergent.

19. A campfire apparatus according to claim 18 wherein said fire pan includes a lower chamber portion formed by a downwardly depending skirt wall and said bottom wall and an upper pan portion formed by said surrounding sidewall, said gas injector located in the lower chamber portion.

20. A campfire apparatus according to claim 19 wherein said skirt wall is cylindrical in shape, said gas injector extending radially inwardly therefrom.

21. A campfire apparatus according to claim 17 including a lid sized and adapted to enclose said pan interior when placed thereon in a mounted state.

22. A campfire apparatus according to claim 21 wherein the free end portion of said post is threaded and wherein said lid includes a connector adapted to threadably mate with the free end portion whereby said lid may be selectively attached to said fire pan when in the mounted state.

23. A campfire apparatus according to claim 22 wherein said lid includes a rotatable handle operative to rotate said connector.

24. A campfire apparatus according to claim 17 wherein said fire pan has a central pan axis and said base has a central base axis, said base and said fire pan secured together such that the central base axis and said central pan axis are co-linear.

25. A campfire apparatus according to claim 24 wherein said post is operative to secure said base and said fire pan.

26. A campfire apparatus according to claim 17 including a quantity of low-density, non-flammable particulate material adapted to be disposed in said fire pan at a depth sufficient to cover the gas outlet when in the assembled state.

27. A campfire apparatus according to claim 26 wherein said particulate material is vermiculite.

28. A campfire apparatus adapted to be placed in an assembled state on a support surface, comprising:

(A) a base adapted to rest on the support surface when in the assembled state;

(B) a fire pan adapted to be supported by said base when in the assembled state, said fire pan including a main body portion having an inner surface, an upper rim and a pan interior;

(C) a lid sized and adapted to enclose the pan interior when in the assembled state, with a portion of said lid being supported by a portion of said main body;

(D) at least one diffuser element disposed in the pan interior of said fire pan and secured thereto when in an assembled state;

(E) a gas injector extending into the interior of said fire pan when in the assembled state and operative to introduce vaporized fuel into the pan interior when connected to the source of fuel, said gas injector terminating in a gas outlet located proximately to said diffuser such that vaporized fuel introduced into the pan interior is incident on a region adjacent to said diffuser element, said diffuser element thereby operative to disperse the vaporized fuel about the fire pan interior when said gas introduces the vaporized fuel therein;

(G) a reservoir adapted to be placed in fluid communication with said gas injector and to provide a source of fuel; and

(H) a quantity of low-density, non-flammable particulate material adapted to be disposed in said fire pan at a depth sufficient to cover the gas outlet when in the assembled state.

29. A campfire apparatus according to claim 28 wherein said fire pan includes a lower chamber portion defining a lower chamber interior and an upper pan portion, said gas outlet terminating in the lower chamber interior.

30. A campfire apparatus according to claim 29 wherein said gas injector is located entirely within said lower chamber.

31. A campfire apparatus according to claim 28 wherein said diffuser element is centrally located in the pan interior.

32. A method of providing an artificial campfire on a support surface, comprising the steps of:

(A) providing a fire pan having an interior and wherein said fire pan includes a gas diffuser disposed in the interior thereof;

(B) placing a quantity of non-flammable particulate material in said fire pan at a selected depth so as to have an upper surface;

(C) introducing a flow of gas into the interior of said fire pan at a location beneath the upper surface of said particulate material and proximate to said gas diffuser;

(D) directing the flow of gas in a direction toward the gas diffuser at a sufficient velocity such that the flow is dispersed by said gas diffuser and diffused upwardly by said particulate material; and

(E) igniting said fuel at the surface of said particulate material.

33. A method according to claim 32 wherein said particulate material is selected from a group consisting of clay, shale, slate, and slag particles, zeolites, alumina hydrates, borates, perlite, vermiculite and sand.

34. A method according to claim 32 wherein said particulate material is vermiculite.